

Flannery exhibits an external secondary power supply, not specifically associated with the computer, as opposed to the internal secondary supply of the subject invention. Furthermore the power of Flannery is transmitted over dedicated power wires, and is not co-transmitted over data carrying wires.

Ashton provides full operating power when the AC power feed is not supplying power, as opposed to the subject invention which provides a limited power unable to support both the memory and the non-essential circuitry. Furthermore, the load of Ashton is external of, and remote from, the unit containing the power supplies.

Reddick supplies full operating power to each subscriber station, as opposed to the limited power of the secondary supply of the subject invention. Additionally, no first and secondary power supplies internal to the station are described and power is not delivered over a twisted wire pair.

Claim Rejections – 35 U.S.C. § 112

Claims 130 and 131 stand rejected under 35 USC 112, second paragraph as being indefinite. Applicant has amended claim 130 to clarify that, in the absence of power from the first internal power supply, power from the second internal power supply is fed to the memory and not to the non-essential circuitry. Claim 131 has been cancelled without prejudice.

Claim Rejections – 35 U.S.C. § 103

Claims 130 - 132 stand rejected under 35 USC 103 (a) over Horning (U.S. Patent 5,414,861) in view of: Flannery (U.S. Patent 5,799,196); or Ashton et al (U.S. Patent 7,116,761); or Reddick et al (U.S. Patent 6,033,101).

The back up power of Horning is based on batteries (col. 13, line 15 – 30) collocated with main power supply 32. The batteries of Horning may thus be selected to be optimized for use with the target computer in which they are placed. This is clearly distinguished from the subject invention in which a limited amount of power is supplied co-transmitted with data for the computer. Such an external source can not easily be sized for a particular application, since the source of power is remotely maintained. Thus the subject invention is distinguished in exhibiting an internal limited power supply arranged to receive power from a remote source over a twisted wire data pair or pairs.

The back-up power of Flannery is provided from an external secondary power supply (108 of Figs. 1A, 1B), not specifically associated with the computer, as opposed to the internal secondary supply of the subject invention. Furthermore the power of Flannery is transmitted over dedicated power wires (col. 6 ln 17 – 20), and is not co-transmitted over data carrying wires.

The back-up power of Ashton supplies full operating power when the AC power feed is not supplying power (abstract; col. 2 ln 17 - 23), as opposed to the subject invention which provides a limited power unable to support both the memory and the non-essential circuitry. Furthermore, the load comprising a remote user device such as a customer telephone is external to the unit containing the power supplies. Additionally power is transmitted over twisted wire cable 36 which exclusively carries power, and does not carry data simultaneously with the power (col. 4 ln 20 – 24; col. 7, line 20 – 24). This is contrasted with internal first and second power supplies of the subject invention, in which the secondary power supply receives a limited power over a data communication twisted wire pair.

Reddick supplies full operating power to each subscriber station (col. 1, ln 65 – col. 2 ln 7), as opposed to the limited power of the secondary supply of the subject invention. Additionally, no first and secondary power supplies internal to the station are described and power is not delivered over a twisted wire pair – instead a coaxial cable is utilized (col 1, ln 5 – 10).

The above contrasts with the subject invention in which the primary power source is mains fed, however the secondary power source is arranged to receive a limited power over communication cabling, i.e. LAN based power. Power over communication cabling is quite limited in relation to a mains fed power supply, and particularly has features and constraints due to the remote aspect of the powering as described for example at pages 84, 85 which differ markedly from an internal battery powered supply. For example, in the event the second internal power supply receiving power over communication cabling does not draw sufficient current, thus representing an underload condition at the remote sourcing side, power after a predetermined period is terminated. Thus, unlike the battery of Horning, the second internal power supply of the subject invention must ensure that a minimum amount of current is consistently drawn so as to prevent termination. Additionally, the second internal power supply must be arranged to meet the interrogation of the remote sourcing side as described in Figs. 18A, 18B and the associated text at pages 79 – 83. Furthermore, unlike batteries which may be drained for a time at a high rate, power over communication cabling is limited and is insufficient to power both the memory and the non-essential circuitry. In the event that the second power source attempts to draw more power than is allowed for a pre-determined time period, power is cut off to the second power source. (Page 84). Thus, the secondary power source of the subject invention must tread a narrow line between undercurrent and overcurrent in order to maintain the supply of power. Such a result is neither suggested nor taught by the prior art.

CONCLUSION

In view of the foregoing, allowance of all pending claims (i.e., claims 130 and 133) is respectfully requested. The Examiner is encouraged to contact Applicant's undersigned agent by telephone if it would in any way aid in the advancement of this application to issue.

Respectfully submitted,

Dated: October 25, 2007
Reg. No. 48,249

/Simon Kahn/

Simon Kahn
Director of Intellectual Property
Microsemi Inc. – Analog Mixed Signal Group Ltd.

Tel: 1-703-486-1150
Fax: 1-703-892-4510